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ABSTRACT

Issues related to children's ability to conceal their immediate emotional experiences by displaying alternate socially or personally motivated facial expressions are discussed. Four basic categories of dissimulation of emotional experience are specified, and motives for the use of cultural and personal display rules and direct deception are posed. Research among first-, third-, and fifth-grade students reveals four categories of display rule use (trouble-avoiding, maintenance of self-esteem, qualifying factors of a relationship, and maintenance of norms), each category increasing with age. Children across all three age groups were able to cite instances in which they concealed their feelings and/or thought they had observed others do so. When age-inappropriate rewards were given to students for evaluating the difficulty level of a workbook, first graders, especially boys, were the most negative, fifth graders, especially girls, were the most positive. The most prevalent behavior across all age groups was smiling slightly, followed by abruptly ceasing to smile altogether. In the concluding section of the paper some effects of children's regulation of facial expression on their emotional experiences are discussed. (Author/RH)

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Emotional Experience and Regulation of Expressive Behavior

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I am intrigued by the seemingly paradoxical changes children show in their development as they learn, first, how to synchronize affect and expressive behavior and, then second, how apparently to disengage affect from expressive behavior. While infancy researchers, among others, have examined the first part of this coordination (e.g., see Lewis & Rosenblum, 1978), the latter disengagement has received little systematic examination. What I am referring to here is what adults in virtually any culture already know (cf. Ekman, 1974): one's behavioral displays may have little resemblance to one's internal emotional experience.

The monitoring and modifying of our expressive behavior constitutes an aspect of self-regulation, and it is probably only gradually acquired as children refine their social-cognitive capabilities (including role-taking skills, recursive thinking, and impression management) and their voluntary muscle control (especially those in the face). By the time we reach adulthood we have learned to regulate habitually our expressive behavior so that we produce for others' observation and for our own coping needs expressive

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transformations of our otherwise direct emotional experience. This emotional dissimulation is most noticeable in the regulation of facial expression, although it is recognized that vocal features, posture, and limb movements are also relevant to discerning dissimulation in nonverbal behavior. My focus in the subsequent discussion will be on facial expression, based on the considerable theory and research that facial expression is a key feature in emotional experience (e.g., Ekman, Friesen, & Ellsworth, 1972; Izard, 1977).

There appear to be four basic categories of dissimulation of emotional experience: (1) the regulation created by adoption of cultural display rules; (2) the dissemblance created by personal or idiosyncratic display rules; (3) direct deception; and (4) theatrical or dramatic pretense. I will discuss each of these categories in turn, with the exception of the last, theatrical pretense, which may be more appropriately discussed within the context of children's play rather than under the rubric of impression management and coping needs. I will also briefly review three of my studies which examined children's understanding and enactment of expressive behavior that was incongruent with internal emotional experience. In addition I shall comment on the controversy surrounding the effects facial expression modification may have on the conscious experience of emotions.

Categories of Emotion Dissimulation

Cultural display rules. Dissociation of emotional experience and expressive behavior is most obvious in cultural display rule usage. Display rules govern the appropriateness of expressive behavior; they are essentially social conventions which prescribe how one should look, even if one does not feel the emotion which would correspond to the "acceptable" facial expression (Ekman, Friesen, & Ellsworth, 1972). For example, one does not normally show one's displeasure at receiving an unwanted gift if the gift-giver expects one to like it (Saarni, Note 2).

Personal display rules. Personal display rules appear to function as coping behaviors: they seem to be motivated by the need to relieve the discomfort of negative feelings by transforming their behavioral expression. For example, personal display rules which are frequently encountered in middle class American culture include appearing calm when feeling upset, smiling or even laughing when feeling anxious, revealing an angry expression when really feeling hurt, and so forth. Some personal display rules which appear to be highly prevalent may in fact also function as cultural display rules (e.g., as in the film "Ordinary People," 1980). There is no developmental research on personal display rules (however, see Saarni, Note 1), despite the claims of such affect theorists as Tomkins (1980), Izard (1977), and Ekman and Friesen (1975) that adults rarely show affective facial expressions which are not

regulated in some way.

Direct deception. A third category of dissimulation which produces a dissociation of affect and expressive behavior is outright deception. Deceptive facial expressions imply a deliberate attempt to mislead another about one's emotional experience in order to gain some advantage over the other or to avoid some distinct disadvantage. For example, an employee may mask his angry facial expression with a "poker face" while his boss rebukes him; revealing his genuine feelings might aggravate the situation to his disadvantage. A youngster who has set off a false alarm may suppress his gleeful expression as he looks at the commotion he has caused. To reveal his delight could make him a suspect, a disadvantage presumably to be avoided. Directly deceptive dissimulation of expressive behavior has had the most developmental research associated with it (e.g., DePaulo, Irvine, Jordan, & Laser, 1980; Feldman, Jenkins, & Popoola, 1978; Krauss & Morency, 1980).

Effect of Dissimulation

These categories of regulation of facial expression create four kinds of modification in the face. First, the effect may be to minimize the expression of one's emotion. For example, one might choose in some situations to look mildly concerned when one actually feels quite worried. Second, one's feelings may be exaggerated in expression; e.g., sadness could be intensified to elicit sympathy. Third, neutralization of expression occurs when one's feeling is masked behind a neutral "poker face." Fourth,

substitution of expression occurs if one's real feeling is concealed by displaying another expression which corresponds to a different feeling, e.g., smiling is often used to conceal anxiety.

These four modifications affect the use of facial muscles. Ekman and Friesen (1975) suggest that with minimization and exaggeration the number of facial areas involved (e.g., forehead, mouth area) is varied, the duration of the expression may be lengthened or shortened, and the degree to which muscles are contracted may be altered. With neutralization the facial muscles may be relaxed, or they may be held tensely but without any obvious pattern of contraction. This latter option frequently creates a "wooden" quality to the facial expression. In substitution one must rely on one's memory to re-create the kinesthetic feedback necessary to adopt a facial expression which does not correspond to one's internal affect.

Ekman and Friesen (1975) contend that it is actually easier to substitute another expression than to adopt a neutral one (one's own emotion tends to leak through the "poker face"). They also cite Darwin for first noting that the smile is among the most common expressive substitutions because "the muscular movements required for smiling are most different from the muscular movements involved in the negative emotions" (p. 142). Our anatomy in this case provides us with a ready way out.

Motivation for Dissimulation

The preceding discussion of the three types of dissociation

of affect and expressive behavior (i.e., cultural display rules, personal display rules, and direct deception) leads to a consideration of why we would be motivated to dissimulate our expressive behavior. It is my contention that the three types of dissociation intrinsically contain the motivational rationale appropriate to each type of dissociation. Thus, for cultural display rules the motive is to observe the societal norms and conventions for expressive behavior in assorted situations. For personal display rules the motive is to relieve the discomfort of negative emotions by transforming their behavioral expression. Directly deceptive dissimulations appear to be motivated by the desire to gain an advantage or to avoid a disadvantage.

These three categories of expressive behavior dissimulation are not necessarily mutually exclusive, although they seem to have clearly distinguishable motivational differences. Just as we may have several different motivations vis á vis a particular action, so might we also have multiple motivations about how and why we modify our expressive behavior in some situation. These three categories do appear to differ in relation to positive versus negative affects and in relation to prosocial versus self-protective behavior. Cultural display rules and direct deception can modify the behavioral expression of both positive and negative affects. Personal display rules focus more often on negative affects. Cultural display rules are more frequently prosocially-oriented insofar as their acquisition integrates the child into his or her culturally sanctioned

emotional-communicative forms. Direct deception may also be for prosocial ends, but this appears to be less frequent among children. Personal display rules, virtually by definition, are self-protective, as are many instances of directly deceptive expressive behavior among children.

Comprehension of motives for dissimulation in childhood. A number of developmental studies indicate that young children may implicitly or explicitly be using motive information in their social transactions. For example, in the moral development area Nelson (1980) has demonstrated that children as young as three years old comprehend motive information in their moral judgments if the motive information is explicit, salient, and available. In the empathy area Strayer (1980) concluded from her naturalistic data that preschoolers "are aware that others feel differently from themselves and that they can also do something appropriate in response to the other child's affective state" (pp. 819-820). Such results imply motivation-based interpersonal behavior. For causal attribution of emotion Green (1977) determined that five-year olds could provide the correct reasoning for the occurence of an affective display significantly more often than chance alone would have predicted. This finding suggests the use of inferential causal reasoning, which is a significant component in comprehension of motives. Finally, Selman and Byrne's (1974) research on role-taking and Turiel's (1978) on the understanding of conventions and moral precepts rest on the assumption that children perceive their

own and others' behavior as motivated. However, the comprehension of motivation may be global and egocentric or, with increasing social-cognitive development, differentiated and decentered.

While children as young as five years can infer causes for emotions per se, it is not known how adequately children at different ages can also infer motives for dissociating affect and expressive behavior. Such motives would seem to be more differentiated in that they are directed toward the fairly sophisticated act of dissociation of affect and expression. On the other hand, many parents can readily report that their toddlers exaggerate distress (and therefore dissimulate the intensity) in order to get attention. Such anecdotes suggest that gaining an advantage may be a motive for some of the earlier-occurring instances of dissociation of affect and expressive behavior.

Apart from my own work underway, I am not currently aware of any research which has systematically examined the different categories of emotion dissimulation and their respective motives. My hypothesis at this time is that direct deception and its concomitant motive to gain an advantage or avoid a disadvantage is the most readily understood dissimulation across all age groups and perhaps the only category comprehended by young children (i.e., under six to seven years). If my hypothesis is true, it may indicate the modality in which socialization is most effective in "persuading" children to monitor and appropriately modify their expressive behavior. This modality would be essentially a reinforcement model: it becomes

useful "to lie" expressively. Certainly socialization research in other behavior areas indicates that a straightforward reinforcement program seems to be most appropriate for young children, with increasing dependence on cognitively-mediated self-controls as children mature.

Additional questions which I am addressing in my current work include: (a) Do young children initially learn cultural display rules as sub-sets of the deception motive? For example, a preschool boy may be instructed not to cry "because boys don't cry;" however, in the young child's mind inhibiting his crying on future occasions may have more to do with avoiding a scolding than with observing sex-typed societal norms. (b) Are personal display rules also acquired initially as sub-sets of the deception motive, or might they derive as well from cultural display rules? For example, does a youngster initially want to avoid others' derision over his vulnerable expression, and only later is his expressive inhibition felt as a stoic strength in the face of adversity? When a child is chastized for screaming tantrums in restaurants, super-markets, etc., and thus directly instructed in the cultural display rule of "don't show your anger in public," does this later become transformed into a personal display rule of not revealing anger expressively or only in highly "miniaturized" forms in order to feel "in control"? (c) Finally, coping with stress is particularly implied in the adoption of personal display rules (see Lazarus' secondary reappraisal construct in the self-regulation of

emotion, 1975), but can personal display rules be over-used to the detriment of the individual's emotional well-being? I am interested in what children think about this possibility.

Research on Display Rules

Dissociation of affect and expressive behavior. In my first study on display rules (Saarni, 1979) children in first, third, and fifth grades responded to four interpersonal conflict situations presented in comic strip style but with photographs of real children. In the final frame the child's face was averted from the camera and could not be seen. Subjects had to select from a set of full-face portraits of the photographed child which facial expression was probably revealed; they also were asked to justify their choice. Analysis of the data revealed, as expected, that display rule usage increased with age. Of particular concern was the attempt to describe display rule usage -- not necessarily the category of motivation. Four descriptive uses were determined; they were trouble-avoiding set, maintenance of self-esteem, qualifying factors of a relationship, and maintenance of norms. Motivation for these four descriptive categories could be all deception-based or have a mixed motivational basis. Questions asked of the children were insufficient to determine motivational bases, and thus the different categories of emotion dissimulation could not be ascertained.

In a second study, I (Note 1) asked the subjects in the above investigation to discuss their personal experiences as to when and

why they would not reveal their feelings and when and why they would. Only instances of neutralizing facial expression ("poker face") and substitution of another expression were coded. Across all three age groups children were able to cite instances in which they concealed their feelings and/or thought they had observed others do this (e.g., "my brother always tries to look important after he's done something stupid."). The results indicated that one of the most common reasons for not showing a variety of feelings to others was to avoid getting into some sort of trouble or problematic situation. A second common reason had to do with avoiding others' derisive teasing about an expression of vulnerability (e.g., "sissy," "cry-baby"). As to when a variety of negative affects could be appropriately revealed, a typical response was when one was bleeding, hurt, or severely and extremely upset. A few older children stipulated conditions ranging from only when one was alone, in front of the television, with very good friends, or with parents. What is revealed in these descriptive results is the frequent expectation of disapproval, in one form or another, from others for revealing unregulated negative expressive behavior. These results indirectly support the hypothesis that deception-based dissimulation of emotional experience may be the foundation for the later acquisition of cultural and personal display rules.

Observation of dissimulation. My most recent study (Note 2) on display rule usage was strictly an observational one. I contrived a "pseudonaturalistic" conflict situation between myself as

a market researcher assessing self-help workbooks and grade school subjects. The children were individually videotaped while evaluating the difficulty level of a workbook, and for their effort they received candy, money, and juice. They returned a second time to evaluate another workbook and were again offered a gift, this time from a "grab-bag." However, the grab-bag consisted of drab, unimaginative baby toys, clearly inappropriate for this age group. The videotapes of the first session provided baseline data for the children receiving desirable rewards, against which expressive behavior in the second session could be compared. While display rule usage could only be inferred, the results indicated that the first graders were the most negative (especially the boys), and the fifth graders were the most positive (especially the girls) in the second session. The most prevalent behavior across all age groups was a slight smile (53%), followed by abruptly ceasing to smile altogether (27%). As mentioned previously, the smile is among the most common expressive substitutions in that the muscular movements for smiling contrast the most with those required for negative emotions.

This study obviously could not determine the categories of emotion dissimulation used by the children, but it did establish a method by which dissimulations could be further explored. However, there are ethical concerns with conducting deceptive research, especially with children, and the situations which could be contrived for eliciting display rule usage should be carefully

monitored for their impact on the well-being of the subjects.

Effects of Facial Expression Regulation on Emotional Experience

A fascinating controversy currently exists around the issue of whether modification of facial expression, in and of itself, affects the conscious experience of emotion ; e.g., if you smile when you initially feel nervous, do you -- as a result of the facial expression dissimulation -- feel subsequently less anxious (cf. Tomkins, 1979)? From my perspective, the research to date has been largely laboratory-based and has little ecological validity (e.g., Laird, 1974; Lanzetta, Cartwright-Smith, & Kleck, 1976). I do think that facial expression regulation, if habitually exercised to an extreme, can affect the conscious quality of emotional experience but not for the narrow reasoning attributed by some as being Tomkins' position on affect and facial activity feedback (cf. Tourangeau & Ellsworth, 1979). What I think may be more pivotally involved is the interpersonal communication and the accompanying social cognition that is influenced by facial expression regulation. For example, if I am distressed and I want your sympathy, and thus I exaggerate my expression of distress and consequently obtain your sympathy, I am very likely to feel less distressed! In this example emotional dissimulation in the exaggerated direction lessens my distress; it does not increase it. The facial expression per se is not the mechanism for altering my conscious emotional experience, rather it is the effects of my facial expression regulation on others and their subsequent behavior toward me which alters my conscious emotional experience. Other appraisals are then generated, leading to altered emotional reactions.

Other anecdotal examples include habitual expressive minimization or neutralization which clinicians in particular have hypothesized

as being associated with a numb, "damped-down" or amorphous conscious emotional experience. Here the assumption is that chronic patterns of inhibited expressive behavior lead to vague emotional experiences, whose character or definition are not readily consciously available to the individual. While there is research suggesting that "poor" encoders are physiologically more reactive (e.g. Buck, Miller, & Caul, 1974), autonomic activity per se is notoriously ambiguous as a source of information for determining exactly what one is feeling. My suggested explanation is that the reason why the chronically inhibited person may not have a clear sense of what he or she is consciously feeling is due to the similarly chronic paucity of communicative feedback from others about the emotional state displayed. In short, it is very difficult to be responsive to "poker-faced" people.

I have discussed more extensively elsewhere the developmental facets of this communicative feedback for establishing conscious definition of affective experience in early childhood (Saarni, 1978). Similar reasoning has also more recently been echoed by Ekman, Friesen, and Ancoli, 1980; however, the basic parameters of this position are to be found in Stern's painstaking work on dyadic interaction of mothers and infants (1974). Briefly, my position is that with the emergence of self-awareness and cognitive evaluation in late infancy, communicative input from others functions to elaborate the cognitive evaluation of the emotion-eliciting situation for the young child and thus communicatively contributes to consciousness of emotional experience. However, for communication to mediate consciousness of affect, something has to be encoded expressively by one person and decoded as meaningful by another. This interaction is normally repeated countless times over for most infants (cf. Stern,

1974), and it gradually works to ground for the infant its expressive signals in the meaningfulness established by the qualitative nature of the interpersonal interaction in which they are displayed. For children whose care-givers systematically invalidate their expressive signals, the effect may well lead to excessive inhibition.

Indirectly supportive research by Buck (1975) showed that those 4-6 year olds who were rated as "poor" senders or encoders (i.e., they more frequently neutralized or minimized affective facial expressions) were also judged by their teachers as shy, emotionally inhibited, controlled, and compliant. These socially uncomfortable children encoded little distinctive expressive behavior, and thus they perpetuated their social withdrawal in that little communicative feedback was elicited in response to their own "damped-down" expressive displays. Conceivably a cycle is established in which over time such children develop a "bleaching of the experience of affect and therefore some impoverishment of the quality of life" (Tomkins, 1979). Eventually, some may show up in clinicians' offices, complaining about their emotional vacuum. To date, there has been no systematic research on family and/or temperamental variables which may be antecedants of excessively inhibited or regulated affective behavior; most relevant would be Bugental, Love, Kaswan, and April's (1971) research on conflicted messages to normal versus disturbed children.

Inconclusion, learning how to disengage expressive behavior from affect reveals both adaptive capacity as well as potential deficit: children learn to maneuver in social transactions through modifying what they reveal about their internal emotional state, yet they may run the risk of over-doing this flexible function of self-regulation.

The deficit side of this disengagement thus appears to be excessive self-consciousness, excessive impression management, and excessive inhibition of affective displays.

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2. Saarni, C. Observing children's use of display rules: age and sex differences. Paper presented at American Psychological Association, Montreal, 1980.

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